

## **REMARKS**

### **1. Summary of Office Action**

In the Office Action mailed March 7, 2005, the Examiner rejected claims 1-3, 5-10, 12, 14-16, and 18-20 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,006,264 (Colby et al.), in view of Charles P. Pfleeger, "Security in Computing," ISBN 013374866, 1996 (Pfleeger), and in further view of William Stallings, "Cryptography and Network Security," ISBN 0138690170 (Stallings). The Examiner rejected claims 4, 11, 13, and 21-22 under 35 U.S.C. § 103(a) as being unpatentable over Colby et al., in view of Pfleeger and Stallings, and in further view of the Official Notice in the previous Office Action. The Examiner rejected claim 17 under 35 U.S.C. § 103(a) as being unpatentable over Colby et al., in view of Pfleeger and Stallings, and in further view of U.S. Patent No. 5,819,091 (Arendt et al.).

### **2. Amendments and Pending Claims**

Applicants have amended claims 1, 16, and 18, and have cancelled claim 17. Presently pending in this application are claims 1-16 and 18-22, of which claims 1, 16, and 18 are independent.

### **3. Response to § 103 Rejections of Claims 1-3, 5-10, 12, 14-16, and 18-20**

The Examiner rejected independent claims 1, 16, and 18, and dependent claims 2-3, 5-10, 12-15, and 19-20, as being obvious over a combination of Colby et al., Pfleeger, and Stallings. Applicants respectfully traverse this rejection, because Colby et al., Pfleeger, and Stallings, whether considered individually or in combination, fail to disclose or suggest the combination of elements recited in any of these claims, as would be required to support an obviousness rejection under M.P.E.P. § 2143.

Independent claims 1, 16, and 18 were amended to include the elements of claim 17, which the Examiner has already examined. The Examiner rejected claim 17 as being obvious over a combination of Colby et al., Pfleeger, Stallings, and Arendt et al.

With respect to claim 1, as amended, the combination of Colby et al., Pfleeger, and Stallings fails to teach the claimed functions of (i) assigning to each service component a respective trustworthiness measure and a respective criticality measure, and using the trustworthiness and criticality measures of each service component to select a respective processing node of the cluster-based computing environment onto which each service component should be programmed, and (ii) programming each service component onto the respective processing node of the cluster-based computing environment selected for each service component. Arendt et al. fails to teach these claim elements as well.

With respect to claim 16, as amended, the combination of Colby et al., Pfleeger, and Stallings fails to teach the claimed functions of (i) assigning to each application component a respective trustworthiness measure and a respective criticality measure, and using the trustworthiness and criticality measures of a given application component to select a given processing node of the public computing platform onto which the given application component should be loaded, and (ii) loading the application components of the at least two applications onto the selected processing nodes of the public computing platform, wherein the selected processing nodes include at least two processing nodes of the public computing platform. Arendt et al. fails to teach these claim elements as well.

With respect to claim 18, as amended, the combination of Colby et al., Pfleeger, and Stallings fails to teach the elements of (i) first logic for assigning a respective trustworthiness measure and a respective criticality measure to each of the plurality of application components

and for using the trustworthiness and criticality measures of the plurality of application components to select which processing nodes of the public computing platform onto which the plurality of application components should be loaded, and (ii) second logic for loading the plurality of application components onto the selected processing nodes. Arendt et al. fails to teach these claim elements as well.

In rejecting claim 17, the elements of which have been added to claims 1, 16, and 18 by amendment, the Examiner indicated that Arendt et al. teaches servers implementing different security levels for different applications, and the Examiner cited to column 7, lines 27-41 in support. However, this section of Arendt et al. merely teaches that a particular server employed in a system may implement two different security levels for a particular DLL file for two different applications, and that the system may be programmed so that two separate servers implement two different security levels for the same application.

In another section of Arendt et al., Arendt et al. teaches that “During operation of the data processing system, a determination is made as to what is the desired security level for a particular application program to be loaded onto the system.” (Col. 2, lines 58-61). Thus, in combination, these sections of Arendt et al. teach (i) implementing different security levels for different applications, and (ii) **determining** what the **security level** is going to be **for a particular application** to be loaded onto a system.

Although Arendt et al. teaches (i) implementing different security levels for a particular file used by two different applications, and (ii) programming a system so that two separate servers implement two different security levels for the same application, Arendt et al. does not teach or suggest (a) assigning both a trustworthiness measure and a criticality measure to an application (or service) component, and (b) using trustworthiness and criticality measures to

*select* a respective *processing node* of a cluster-based computing platform (or a public computing platform) onto which service component (or application component) should be programmed (or loaded). Moreover, determining a security level for an application to be loaded onto the system is not the same as selecting a processing node onto which application (or service) components are to be loaded.

For these and potentially other reasons, Applicants submit that Arendt et al. (alone or in combination with Colby et al., Pfleeger, and Stallings) does not teach or suggest all of the elements of claims 1, 16, and 18.

Since Colby et al., Pfleeger, Stallings, and Arendt et al, whether considered alone or in combination, fail to disclose or suggest all of the elements of claims 1, 16, and 18, Colby et al., Pfleeger, Stallings, and Arendt et al. fail to render obvious the invention of claims 1, 16, and 18. Further, claims 2-3, 5-10, 12-15, and 19-20 depend from either claim 1 or 18 and therefore incorporate all of the limitations of either claim 1 or 18, and thus Colby et al., Pfleeger, Stallings, and Arendt et al. fail to render obvious the invention of claims 2-3, 5-10, 12-15, and 19-20 as well.

#### **4. Response to § 103 Rejections of Claims 4, 11, 13, and 21-22**

The Examiner next rejected claims 4, 11, 13, and 21-22 as being obvious over a combination of Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action. Applicants traverse this rejection because the combination of Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action fails to disclose or suggest all of the limitations of these claims, as required to support an obviousness rejection.

Claims 4, 11, 13, and 21-22 depend from either claim 1 or claim 18 and therefore incorporate all of the limitations of either claim 1 or 18. For the reasons stated above, the

combination of Colby et al., Pfleeger, Stallings, and Arendt et al. fails to render obvious the invention of claims 4, 11, 13, and 21-22.

The Official Notice of the previous Office Action merely indicates that it is old and well-known that (i) UDP ports are used in Internet Protocol communications, (ii) the Internet includes nodes with antagonistic service components hosted by many competing application providers, and (iii) node owners connected to the Internet have various level agreements.

With respect to claims 4, 11, and 13, Applicants submit that Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action, alone or in combination do not teach the claimed functions of (i) assigning to each service component a respective trustworthiness measure and a respective criticality measure, and using the trustworthiness and criticality measures of each service component to select a respective processing node of the cluster-based computing environment onto which each service component should be programmed, and (ii) programming each service component onto the respective processing node of the cluster-based computing environment selected for each service component.

With respect to claims 21, and 22, Applicants submit that Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action, alone or in combination, do not teach the claimed elements of (i) first logic for assigning a respective trustworthiness measure and a respective criticality measure to each of the plurality of application components and for using the trustworthiness and criticality measures of the plurality of application components to select which processing nodes of the public computing platform onto which the plurality of application components should be loaded; and (ii) second logic for loading the plurality of application components onto the selected processing nodes.

Because Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action, whether considered alone or in combination, fail to disclose or suggest all of the elements of claims 4, 11, 13, and 21-22, Colby et al., Pfleeger, Stallings, and the Official Notice of the previous Office Action fail to render obvious the invention of claims 4, 11, 13, and 21-22.

**5. Response to § 103 Rejection of Claim 17**

The Examiner next rejected claim 17 as being obvious over a combination of Colby et al., Pfleeger, Stallings, and Arendt et al. Since Applicants have cancelled claim 17, Applicants submit this rejection is moot.

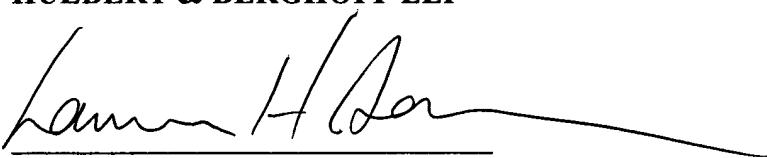
**6. Conclusion**

For the foregoing reasons, Applicants submit that claims 1-16 and 18-22 are in condition for allowance. Therefore, Applicants respectfully request favorable reconsideration and allowance of all of the claims.

Respectfully submitted,

**MCDONNELL BOEHNEN  
HULBERT & BERGHOFF LLP**

By:

  
\_\_\_\_\_  
Lawrence H. Aaronson  
Reg. No. 35,818

Date: May 2, 2005